

CHAPTER 4 SECTION 2.2

COMPUTERIZED TOMOGRAPHY

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I. PROCEDURE CODE RANGE

70450-70492, 71250-71270, 72125-72133, 72192-72194, 73200-73202, 73700-73702, 74150-74170, 76355-76380

II. DESCRIPTION

Computerized tomography records attenuated x-ray transmissions through the body and, utilizing a mini-computer, reconstructs a graphic image of a tomographic "slice" of a body area with marked anatomical detail.

III. POLICY

Medically necessary CT scans of the head and body are covered when all of the following criteria are met:

- A. The patient is referred for the diagnostic procedure by a physician; and
- B. The CT scan procedure is consistent with the preliminary diagnosis or symptoms; and
- C. Other noninvasive and less costly means of diagnosis have been attempted or are not appropriate; and
- D. The CT scan equipment is licensed or registered by the appropriate state agency responsible for licensing or registering medical equipment which emits ionizing radiation; and
- E. The CT scan equipment is operated under the general supervision of a physician; and
- F. The results of the CT scan diagnostic procedure are interpreted by a physician.

IV. POLICY CONSIDERATIONS

A. General. Claims for CT scans must be carefully reviewed to determine that the CT scan was medically appropriate considering the patient's symptoms and preliminary

diagnosis. If there is any question as to the appropriateness of a CT scan, the attending physician should be asked to document the medical necessity.

B. Primary diagnostic tool for some conditions. CT scans have become a primary diagnostic tool for many conditions and symptoms making other noninvasive and less costly means of diagnosis not appropriate. In those cases where a CT scan is an appropriate primary diagnostic tool it is not necessary to request information on the results of other noninvasive testing. CT scans may be considered a primary diagnostic modality for evaluation of the following:

1. Brain tumors
2. Brain hemorrhage
3. Severe head trauma
4. Undiagnosed coma in children
5. Progressive focal neurological signs in children
6. Megalocephaly

C. CT Scan in the Evaluation of Headaches. CT scan is not indicated in the evaluation of uncomplicated, minor headache when it presents as an isolated symptom. CT scan may be indicated in the following:

1. Evaluation of headache that is intractable, unresponsive to medical management, or has changed in character.
2. Evaluation of headache when it is associated with neurological signs or symptoms, or abnormal laboratory findings.
3. In acute or chronic headache when it is associated with a history of prior trauma, prior malignancy or a significant family history of neurological disease which might be associated with structural causes for headache (e.g., neurofibromatosis, tuberous sclerosis).

D. CT Scan in the Evaluation of Cerebrovascular Disease. CT scan may be indicated in suspected cerebrovascular disease when uncertainty exists in the differential diagnosis of cerebral infarction, cerebral hemorrhage or cerebral ischemia.

E. CT Scan in the Evaluation of Dementia. CT scan may be indicated in patients with dementia that is associated with neurological signs or symptoms (e.g., loss of intellectual function) of recent onset or which follows a rapidly progressive course.

F. CT Scan in Evaluation of Newborn. If ultrasound is not available, CT scan may then be used as a primary diagnostic tool in evaluating intracranial disease prior to the closure of the anterior fontanel. CT scan frequently complements ultrasound in refining diagnosis or in defining some parenchymal diseases such as peripheral hemorrhages not seen on ultrasound. CT scan is indicated, after the fontanel has closed, in the evaluation of suspected

intracranial disease in infants and children. (See [Section 3.1](#) of this chapter for policy concerning ultrasound diagnostic procedures.)

G. CT Scan in the Pediatric Patient. CT scan may be indicated in a pediatric patient with significant pertinent historical, physical, neurological, or laboratory data indicating the presence of intracranial disease. Clinical conditions include the following:

1. Intracranial congenital abnormalities with or without associated somatic syndromes.
2. Disorders of growth and development.
3. Abnormalities of head size.
4. Mental retardation, seizures, head trauma, and chronic headaches, particularly when there are additional significant clinical findings.

H. Mobile Units. CT scans performed by mobile units are subject to the same coverage requirements applicable to scans performed by stationary units.

I. Not Necessary to Review on a Claim-by-Claim Basis. To monitor and enforce these criteria on a claim-by-claim basis is unrealistic. Contractors should look for utilization patterns over time on a post-payment basis.

J. Helical (spiral) CT scans, with or without contrast enhancement, are covered for the diagnosis of acute appendicitis.

V. EFFECTIVE DATE

A. October 1, 1978, for standard CT scans.

B. January 1, 1997, for helical CT scans.

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